

ABSTRACT OF THE INVENTION

Carborane based PAG's are bulky, produce a strong and large superacid, and have polarities that are compatible with the chemically amplified polymers typically used in photoresists. Carborane based PAG's also provide another broad class of bulky PAG's that may be used in photoresist formulations that offer flexibility in acid strength and polarity through changes in chemical structure. These PAG's may be used with EUV wavelengths, 157 nm, or 193 nm. Resolution and critical dimension control may be improved through the use of carborane based PAG's.